Abstract

Cloud Computing allows resource usage based on needs of the business customers. In this paper, we present an autonomous management system that uses virtualization technology to allocate data center resources effectively based on application demands that supports green computing to save energy used by optimizing the number of servers in use. We implement the concept of "skewness" to measure the irregularity in the multi-dimensional resource utilization of a server. By reducing skewness, we can improve the overall utilization of server resources and combine different types of workloads fairly. Cloud SIM simulation and experiment results demonstrate that our algorithm achieves better performance.
Autonomous Management System for Dynamic Resource Allocation in Cloud Computing

References

- &quot;Amazon elastic compute cloud (Amazon EC2),&quot; http://aws.amazon.com/ec2/, 2012.
Index Terms

Computer Science    Cloud Computing
Keywords